

1 further disputes and litigation. I will also show, as background, that the  
2 Commission is clearly correct that both line splitting and line sharing are  
3 necessary to enable consumers to benefit from a competitive market for advanced  
4 services.

5 **Q. PLEASE DEFINE "LINE SHARING" AS AT&T USES THAT TERM**  
6 **HERE.**

7 **A.** Line sharing is defined in the Definitions section of AT&T's Schedule 11.2.17 as:

8 Use of the HFS of Verizon's local loop by AT&T or a third party  
9 CLEC to provide Advanced Services to customers when Verizon  
10 simultaneously provides the customer's retail local voice service in  
11 the low frequency spectrum of the same local loop.  
12

13 This is fully consistent with the definition established in the Commission's orders.

14 The Commission found that line sharing was necessary to begin to allow  
15 consumers to benefit from competition for advanced services.<sup>188</sup> Line sharing  
16 was ordered by the Commission in December 1999, and incumbents were  
17 required fully to implement line sharing by June 6, 2000.<sup>189</sup>

18 **Q. PLEASE DEFINE "LINE SPLITTING" AS AT&T USES THAT TERM**  
19 **HERE.**

20 **A.** "Line splitting" is defined in the Definitions section of AT&T's Schedule 11.2.17  
21 as:

22 Simultaneous use of both the low frequency spectrum and high  
23 frequency spectrum of a single loop by AT&T when Verizon does  
24 not provide the customer's retail local service using the low

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188 *Deployment of Wireline Services Offering Advanced Services Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, FCC Rcd 20912 (1999). ("Line Sharing Order"), ¶ 4-5.

189 *See id.* ¶ 161.

1 frequency spectrum. AT&T, using its own facilities or the UNEs  
2 of Verizon, provides services in the low frequency spectrum.  
3 Services in the high frequency spectrum may be provided by either  
4 AT&T or a third party CLEC, given that the CLEC providing  
5 service in the HFS is authorized by AT&T, the party responsible  
6 for the entire loop, to utilize the HFS. Services in the HFS may be  
7 provided using AT&T's own facilities, through the use of resold  
8 services (whether retail or wholesale), through the use of UNEs, or  
9 any technically feasible combination of the preceding.  
10

11 The Commission found that line splitting is an important competitive  
12 requirement, because:

13 "the availability of line splitting will further speed the deployment  
14 of competition in the advanced services market by making it  
15 possible for competing carriers to provide voice and data service  
16 offerings on the same line. . . . At present, end users receiving  
17 voice service from competing carriers via the UNE-platform may  
18 be unable to get xDSL service from a competing carrier without  
19 migrating their voice service back to the incumbent LEC [*i.e.*, to a  
20 line sharing arrangement]. Line splitting, however, increases  
21 consumer choice by making it possible for carriers to compete  
22 effectively with the combined voice and data services that are  
23 already available from incumbent LECs and through line sharing  
24 arrangements. In addition, line splitting provides voice carriers  
25 who do not wish to provide xDSL services at this time [the  
26 opportunity] to develop partnerships with data carriers and thereby  
27 offer end users voice and data services on the same line."<sup>190</sup>  
28

29 Critically, the Commission also found that line splitting is only one  
30 application of an incumbent LEC's larger obligation under our rules to provide  
31 access to network elements in a manner that allows a competing carrier "to  
32 provide any telecommunications service that can be offered by means of that

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190 *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order on Reconsideration in CC Docket No. 98-147 and Fourth Report and Order on Reconsideration in CC Docket No. 96-98, released January 19, 2001, FCC 01-26, ("*Line Sharing Reconsideration Order*"), ¶ 23.

1 network element.”<sup>191</sup> Moreover, the Commission held that incumbents “have a  
2 *current obligation* to provide competing carriers with the ability to engage in line  
3 splitting arrangements. . . [because] the definition of a ‘network element’ in the  
4 Act does not restrict the services that may be offered by a competing carrier and  
5 expressly includes ‘features, functions and capabilities that are provided by means  
6 of such facility or equipment.’”<sup>192</sup>

7 Further, the Commission held that “incumbent LECs are required to make  
8 all necessary modifications to facilitate line splitting, including providing  
9 nondiscriminatory access to OSS necessary for pre-ordering, ordering,  
10 provisioning, maintenance and repair and billing for loops used in line splitting  
11 arrangements,” as well as the “central office work necessary to deliver unbundled  
12 loops and switching to a competing carrier’s physically or virtually collocated  
13 splitter that is part of a line splitting arrangement.”<sup>193</sup> Incumbents are required to  
14 allow competitors to order line splitting *immediately*, using manual processes  
15 where necessary.<sup>194</sup> They are also encouraged to use existing state collaboratives  
16 and change management processes to implement the changes necessary to:

- 17 (i) develop a single-order process to add xDSL service to existing  
18 UNE-platform voice customers;

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191 *Id.* ¶ 24.

192 *Id.* ¶18 (emphasis added); *see also* FCC Rule 51.307(c).

193 *Id.* ¶ 20. The Commission also stated that it expected to resolve “expeditiously” the issue of whether incumbents should be required to provide splitters to competing carriers. *Id.* ¶ 25.

194 *Id.*, n.36.

- 1 (ii) allow competing carriers to forego loop qualification if they choose to  
2 do so;  
3 (iii) order loops to be used in line splitting as a “non-designed” service;  
4 and  
5 (iv) use the same number of cross connections, and the same length of tie  
6 pairs for line splitting as in line sharing arrangements.<sup>195</sup>

7 Incumbents are also required to develop processes that would allow  
8 customers who are served through a line sharing arrangement to migrate to a line  
9 splitting arrangement with a new voice carrier and the existing advanced services  
10 carrier using a streamlined ordering process that employs customers’ existing  
11 loops and avoids any disruption to either their voice or advanced data service.<sup>196</sup>  
12

13 **II. Line Sharing and Line Splitting Are Necessary to Support a Competitive**  
14 **Market.**

15 **Q. ARE LINE SHARING AND LINE SPLITTING NECESSARY TO**  
16 **SUPPORT A COMPETITIVE MARKET FOR LOCAL SERVICES?**

17 **A.** Yes, for three reasons. First, line sharing and line splitting provide a significant  
18 market entry opportunity for new entrants. Second, it is important to boost DSL  
19 competition, because former RBOCs such as Verizon have come to dominate that  
20 market segment. Third, failure to adopt contract provisions that foster line  
21 sharing and line splitting will have significant negative consequences on

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195 *Id.* ¶ 21.

196 *Id.* ¶ 22.

1 competition for both advanced data services and bundles of voice and advanced  
2 data services.

3 **Q. WHAT MARKET ENTRY OPPORTUNITIES DO LINE SHARING AND**  
4 **LINE SPLITTING OFFER TO NEW ENTRANTS?**

5 **A.** Because currently available technology can split the transmission path on a single  
6 copper facility (*i.e.*, a 2-wire analog loop) into separate logical paths using  
7 separate frequency bands for transmitting communications, the vast majority of  
8 residential and business customers will no longer need to dedicate their local  
9 access line solely to traditional local voice services. With relatively little  
10 disruption or cost, most loops can now be used to provide access to both a  
11 traditional circuit switched network and an advanced services network.

12 This technology, when incorporated into metallic twisted-pair loops, is  
13 referred to as a Digital Subscriber Line (DSL) loop. Such sharing of the access  
14 line for traditional voice services and advanced services provides cost efficient  
15 solutions for business and residential customers alike. DSL technology not only  
16 generates savings by eliminating the need for a second access line, it also offers  
17 transmission rates that are orders of magnitude greater than those achievable  
18 through the use of dial-up analog modems. Moreover, it supports transmissions  
19 to/from advanced service networks while the very same loop is simultaneously  
20 used for traditional voice communications. High-speed access to the Internet is  
21 an advanced services application that is ideally suited for the “subdivided”  
22 transmission facility. Internet access is increasingly becoming less a novelty and  
23 more a necessity and, with high-speed access, more of the capabilities inherent in  
24 the Internet can be utilized.

1           As a result, deployment of DSL technology provides carriers with a  
2           unique growth opportunity not previously experienced in local markets. Industry  
3           estimates project that annual growth will be in the range of 60-65% through 2002  
4           and average 33% per year for 2002 through 2005.<sup>197</sup> In fact Verizon itself has  
5           recently cited growth rates in the range of 100% for 2001.<sup>198</sup> Even with such  
6           growth rates, the existing base of customers is relatively small, but the potential  
7           for adding new customers is vast. Verizon and other incumbents have fully  
8           recognized this opportunity. By Verizon's own estimates, less than 10% of  
9           homes have high-speed access, yet 56% of adults and 75% of teenagers use the  
10          Internet.<sup>199</sup>

11           Unfortunately, the hoped-for competitive benefits from line sharing have  
12          been severely mitigated by the financial woes of data LECs, which were driven in  
13          no small part by the ILECs' opposition and foot-dragging. Thus, line splitting—  
14          particularly from carriers such as AT&T that plan to offer both voice and  
15          advanced data services—provides a critical means of re-energizing competition  
16          for both voice and advanced services.

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197    The Yankee Group estimates that there will be 2.8M subscribers by EOY 2001 growing to almost 10.5M by 2005. "Residential Broadband: Cable Modems and DSL Reach Critical Mass", The Yankee Group Report, Volume 5, No. 3 March 2001.

198    Verizon had 720,000 subscribers through Mar '01 and projected 1.2-1.3 million customers by the end of this year. June 11, 2001 Presentation by Verizon co-Chairman Charles Lee to CIBC World Markets Annual Investor Conference, found at <http://investor.verizon.com>.

199    According to a June 19, 2001 speech by Verizon's co-Chairman Ivan Seidenberg to the Computer and Communications Industry Association, about 9 M households, a little under 10% of on-line homes, have some form of high-speed connection, either cable modems/DSL, 104 million adults in the U.S. use the Internet—(56% of the total) and another 30 million users are under the age of 18 – (75% percent of all teenagers).

1   **Q.    WITHIN ITS OPERATING TERRITORY DOES VERIZON CURRENTLY**  
2   **PROVIDE THE VAST MAJORITY OF DSL LOOP ACCESS?**

3   **A.**Yes. Competition in the DSL market segment is dwindling as Verizon and other  
4   ILECs have come to dominate the market for such capabilities. For example,  
5   Verizon, as the sole telecommunications supplier of a bundled voice and  
6   advanced data offer on a single wired line, has acquired a 90% share of the  
7   residential DSL market, and its share is rising.<sup>200</sup>

8           Verizon clearly recognizes the demand for DSL capabilities, as well as the  
9   benefits to be derived if Verizon engineers and leverages a considerable  
10   advantage in this important area, based on its entrenched position as the  
11   incumbent LEC and its (and its affiliates') ability to use existing network facilities  
12   with relative ease, while competitors must wage legal and operational battles to  
13   obtain comparable access. In particular, Verizon recognizes the strategic  
14   significance of providing "one-stop shopping" for the range of services that  
15   consumers want and expect.

16   **Q.    WHAT CAN BE DONE TO PUT COMPETITORS ON A MORE LEVEL**  
17   **PLAYING FIELD WITH VERIZON?**

18   **A.**With the exception of the largest incumbents, and especially the former RBOCs,  
19   few telecommunications carriers can support the investment necessary to deploy  
20   both a circuit switched (voice) network and an advanced services (packet  
21   switched) network. Further, such duplication is frequently needlessly inefficient

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200   The ILECs, Verizon among them, have increased their market share by an additional percentage point during the first quarter of 2001. See Telechoice DSL Deployment Summary at [http://www.xdsl.com/content/resources/deployment info.asp](http://www.xdsl.com/content/resources/deployment%20info.asp). Thus, rather than the market becoming more competitive, it is becoming less. It is foreseeable that

1 and is one — if not the — major reason for requiring access to incumbents’  
2 unbundled network elements and other in-place facilities under the Act. As a  
3 result, in order to offer a complete package of services to the market, new entrants  
4 need a means to provide either the voice or the advanced service capability while  
5 working with another party to provide the capability it lacks. This is precisely the  
6 situation the *Line Sharing Order* addressed. However, line sharing is only a  
7 partial solution, because, standing alone, it grants the incumbent a *de facto*  
8 monopoly over the provision of local voice service in such cases.

9 Therefore, line *splitting* is the necessary pro-competitive complement to  
10 line sharing. By eliminating the requirement that the incumbent continue as the  
11 provider of voice service when a loop is used to provide both voice and advanced  
12 data services, line splitting enables a customer to choose a carrier other than the  
13 incumbent for his or her voice service. At the same time, it permits an advanced  
14 service provider to focus investment in emerging technologies while still offering  
15 its customers traditional voice services that are not branded as the incumbent’s.

16 By providing a practical complement to line sharing (and assuring that it  
17 works), competitors will be less likely to be swept off the modest competitive  
18 inroads they have made in Verizon’s territory. Adopting the contractual terms  
19 that AT&T proposes will help to clarify Verizon’s obligations to support line  
20 sharing and line splitting and reduce Verizon’s opportunities to take advantage of  
21 ambiguities in contract provisions that make it more difficult for new entrants to

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Verizon’s market share will only increase given the difficulties of other DSL-competitors, such as Covad and Rhythms and Northpoint’s bankruptcy.



engage in these activities. Continued vigilance, however, will continue to be required to assure the provisions operate as intended.

**Q. HOW WOULD THE FAILURE TO REQUIRE VERIZON TO IMPLEMENT AT&T'S PROPOSED CONTRACT LANGUAGE REDUCE PROSPECTS FOR BROAD DEPLOYMENT OF DSL TECHNOLOGY AND COMPETITION FOR VOICE SERVICES?**

**A.** The benefits of DSL technology are a two-edged sword for consumers. Absent the necessary support for both line sharing and line splitting from incumbents, the success of incumbent-provided DSL will significantly inhibit competition for both advanced data and voice services. As the Commission recognized in both the *Line Sharing Order* and the *Line Sharing Reconsideration Order*, competitors will find it nearly impossible to compete for the highest value customers if they cannot have meaningful access to the high frequency spectrum ("HFS") of a customer's existing local loop. AT&T's proposed contract language is intended to assure that AT&T (and any other carrier that may opt into AT&T's interconnection agreement) will have a real opportunity to access the HFS of Verizon's loops to provide competitive services while not compromising their underlying business strategy.

**Q. WHAT TYPE OF DISADVANTAGES DO COMPETITIVE CARRIERS FACE IN COMPETING WITH INCUMBENTS?**

**A.** A carrier, particularly one providing voice services, that seeks to compete with an incumbent LEC's package of voice and advanced services is at a severe competitive disadvantage from the start. For example, a standalone loop in VA currently costs in the range of \$10.74 to \$19.40 per month, without any port charges, recovery of non-recurring charges and any other costs of serving to the customer. As a result, the *Line Sharing Order* recognized that any new entrant

1 seeking to compete with the incumbent's DSL service through the use of a second  
2 line is at a severe disadvantage.<sup>201</sup>

3 As noted above, few CLECs have the resources to simultaneously deploy  
4 both a circuit switched and an advanced services network. Furthermore, it is  
5 generally well recognized that the initial establishment of DSL is often a lengthy  
6 and difficult experience for the customer and, once established, customers are  
7 extremely hesitant to modify their existing service configuration. As a result, the  
8 existence of previously installed DSL service – particularly if provided by an  
9 ILEC – can be a substantial barrier to convincing a retail customer to change his  
10 or her voice provider.

11 Finally, the need for clarity and precision is demonstrated by the  
12 incumbents' own actions. For over a year, incumbents denied any obligation to  
13 support line splitting and seized upon the literal wording of the Commission's line  
14 sharing rules to discourage or deny customer migrations away from their voice  
15 service.<sup>202</sup> Such practices can only be halted by crystal-clear interconnection  
16 agreement language that sets forth the incumbent's duties in this important  
17 competitive area.

18 Full and fair competition requires that customers have a relatively easy  
19 and non-disruptive means to transition from the ILEC's voice service to CLEC  
20 voice service. The *Line Sharing Reconsideration Order* correctly recognized that

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201 *Line Sharing Order*, ¶ 133.

202 In fact, because line sharing requires use of the ILEC's retail local voice service on the line and because termination of that voice service caused ownership of the entire loop

1 competitors need appropriate support mechanisms from incumbents if line  
2 splitting is ever to be successful. In particular, that order recognized that  
3 customers would face significant disincentives to switch their current service if  
4 their current ILEC service (voice, DSL or both) would have to be disconnected  
5 and assigned to a new unbundled loop, or if they were required to purchase a  
6 second line in order to add DSL service. These disincentives would have dire  
7 consequences for the development and maintenance of local competition. In  
8 addition, reports of problems experienced by other customers create even higher  
9 barriers to competition by making customers more reluctant to change from the  
10 incumbent's "safe" service offerings.

11 **Q. WHY IS IT IMPORTANT THAT UNE-P CARRIERS HAVE AN**  
12 **OPPORTUNITY TO ENGAGE IN LINE SPLITTING?**

13 **A.** The most successful competitive entry strategy to date in the residential market  
14 has been through the use of UNE-P. The success is largely attributable to the fact  
15 that UNE-P represents a relatively cost-effective, prompt and non-disruptive  
16 means for a CLEC to win customers and, when appropriate, begin to transition  
17 them to its facility-based network. However, the presence of DSL technology on  
18 a loop or the desire of a customer for advanced service access has the potential to  
19 "undo" all the positive aspects of UNE-P.

20 If CLECs cannot effectively use UNE-P together with DSL to offer  
21 consumers a competitive choice, their ability to obtain (or keep) the most valuable  
22 customers (and thus the ability to generate cash for investment to serve other

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UNE to revert to the user of the HFS, in some parts of the country, AT&T UNE-P conversion orders were rejected because the HFS of loop was in use.

1 customers) is significantly reduced. The prospect of monopolization of the  
2 nascent advanced services market by Verizon is very real, as are the prospects of  
3 halting and reversing what little erosion has occurred of Verizon's market power  
4 in the provision of local voice services. Therefore, it is critical that Verizon be  
5 required to implement line splitting now, in a manner that permits its practical use  
6 at commercial volumes. Thus, if properly supported, line splitting could help to  
7 reverse the trend of higher ILEC prices for DSL capabilities. Notably, those  
8 prices began to rise as line-sharing competitors began to suffer market reversals,  
9 (*e.g.*, Verizon and SBC announcements of price increases).

10 **Q. WHAT OTHER BENEFITS WILL RESULT FROM FULL**  
11 **IMPLEMENTATION OF LINE SHARING AND LINE SPLITTING?**

12 **A.** Maximizing the use of line sharing and line splitting market entry strategies will  
13 further well established public policy objectives. First, it will help to prevent  
14 monopolization of the advanced services market and remonopolization of the  
15 voice market. The Telecommunications Act was intended to *foster* competition in  
16 the local exchange marketplace. CLECs should not be denied the opportunity to  
17 maximize the utility of unbundled network elements so that they can provide their  
18 customers all of the telecommunications services they desire. Second, it will  
19 provide incentives for investment because it will enable CLECs to secure a  
20 critical mass of residential and small business customers that can ultimately be  
21 migrated to UNE-L strategy on a project basis and according to a timetable  
22 agreeable to the CLEC and its customers. Third, it will create opportunities for  
23 innovation, so that carriers no longer need to be all things to all customers.  
24 Rather, they will be able to focus on strategies that build upon their strengths and

1 to establish partnerships with others that have complementary business objectives.

2 This, in turn, will allow those carries to serve more customers in more markets.

3 **Q. HOW WILL AT&T'S PROPOSED CONTRACT LANGUAGE HELP TO**  
4 **MAXIMIZE THE AVAILABILITY OF LINE SHARING AND LINE**  
5 **SPLITTING?**

6 **A.** AT&T's contract language is intended to minimize ambiguities and to assure that  
7 there is a clear set of terms and conditions that will apply to Verizon's  
8 provisioning of both line sharing and line splitting. For example, the Commission  
9 was clearly correct to require in *the Line Sharing Reconsideration Order* that  
10 incumbents must develop single-order processes to add xDSL service to existing  
11 voice service wherever possible. Although the conversion of an ILEC's POTS  
12 customer to a UNE-P carrier's POTS service is largely a matter of record keeping,  
13 experience has taught that such conversions can be plagued by problems,  
14 including loss of the customer's telephone number, dropped directory listings and  
15 incorrect information provided to E-911 databases due to practices such as the  
16 ILEC's decision to work multiple manual orders in an uncoordinated manner.  
17 Similar problems (or even new ones) could arise if UNE-P arrangements must be  
18 torn down and then reassembled through the use of multiple new orders for  
19 individual network elements using new procedures that have yet to be disclosed,  
20 much less tested.

21 Moreover, AT&T and its customers face other potential service issues.  
22 These include, among other things, lengthy provisioning processes for new  
23 "qualified" loops compared with the typical 3-day (or shorter) period to provision  
24 UNE-P and the possibility of lengthy service disruptions when the customer's  
25 existing loop is re-terminated to a splitter in an AT&T (or a cooperating carrier's)

1 collocation. Furthermore, if the carrier operating in the HFS of line shared loop  
2 has an appropriate business arrangement with AT&T, there is absolutely no  
3 justification for putting the customer at risk if the customer agrees to move its  
4 voice and existing DSL capabilities to AT&T. Such a change, as with UNE-P, is  
5 simply a records change on the part of the ILEC. A single order process (viewed  
6 from the CLEC perspective) coupled with highly coordinated and mechanized  
7 back office processes of the incumbent are necessary to avoid such problems to  
8 the greatest extent possible. Such an expectation is not unreasonable, because the  
9 parallels between line splitting and line sharing are extensive. Nevertheless, in  
10 order to ensure that Verizon fulfills all of its obligations to support line splitting,  
11 detailed contractual provisions are critical.

12

13 **III. Verizon's Basic Line Sharing and Line Splitting Obligations.**

14 **Q. WHAT IS AT&T'S POSITION ON VERIZON'S BASIC OBLIGATION TO**  
15 **SUPPORT LINE SHARING AND LINE SPLITTING?**

16 **A.** Verizon's line sharing and line splitting obligations are rooted in the  
17 nondiscrimination principles of § 251(c)(3). Specifically, Verizon must  
18 implement line sharing and line splitting in a nondiscriminatory and commercially  
19 reasonable manner that allows AT&T to provide services in the HFS of a  
20 customer's *existing* loop, regardless of the service architecture AT&T selects to  
21 provide any voice service it offers to that customer. If Verizon provides the voice  
22 service and AT&T provides advanced data services by leasing the HFS, Verizon's  
23 obligations are covered by the Commission's rules for line sharing. If AT&T is  
24 providing the voice service through either a UNE-P or UNE-Loop configuration,

1 Verizon's obligations are covered under the Commission's requirements for line  
2 splitting. In addition, Verizon must promptly implement nondiscriminatory and  
3 commercially reasonable support processes that enable AT&T to use all of the  
4 features, functions and capabilities of a loop so that AT&T, even when it works  
5 with another carrier, may provide any technically feasible services a single loop  
6 facility can support.

7 **Q. ARE VERIZON'S OBLIGATIONS FOR LINE SHARING AND LINE**  
8 **SPLITTING SIGNIFICANTLY DIFFERENT?**

9 **A.** No. Because the technical configurations for both line sharing and line splitting  
10 are nearly identical, Verizon's obligations should be nearly identical in both  
11 cases. In particular, when AT&T elects to use UNE-P to provide voice service, it  
12 must be able to implement a line splitting arrangement as swiftly, seamlessly,  
13 reliably, and economically as when Verizon provides both voice and advanced  
14 services to a customer over a single loop or when a data-only CLEC provides  
15 advanced data services over a customer's existing loop using line sharing from  
16 Verizon. At a minimum, Verizon must provide nondiscriminatory support in the  
17 following circumstances:

- 18 • When AT&T adds DSL service to an existing UNE-P voice customer;
- 19
- 20 • When AT&T establishes a bundled voice/DSL service for a new customer;
- 21
- 22 • When AT&T seeks to convert a customer's voice service to AT&T without
- 23 changing the customer's existing DSL provider;
- 24
- 25 • When AT&T requests that the DSL carrier in an existing line splitting
- 26 arrangement be changed; and
- 27
- 28 • When AT&T requests Verizon to disconnect an existing DSL service on an
- 29 AT&T loop.
- 30

1           It should go without saying that Verizon's continued support of these  
2           activities following implementation of the changes described above must also be  
3           nondiscriminatory.

4   **Q.   ARE THE DISTINCTIONS BETWEEN LINE SHARING AND LINE**  
5   **SPLITTING PRIMARILY BASED IN OPERATIONAL OR**  
6   **TECHNOLOGICAL CONSIDERATIONS?**

7   **A.**   No. The principal difference between line splitting and line sharing is the purely  
8           legal distinction of whether or not the ILEC provides voice service over the  
9           customer's line. From a technological standpoint, they are nearly identical. In  
10          both line sharing and line splitting, the outside plant facility (the loop) is brought  
11          from the customer's premises to the ILEC central office that serves the customer,  
12          where it is cross-connected to the input port of a splitter. The splitter, which is a  
13          passive device, provides a filtering function that prevents the low frequency band  
14          (voice) transmissions from exiting one of its output ports and prevents the high  
15          frequency band (advanced service) transmissions from exiting the splitter's other  
16          output port.

17                 Inserting the splitter into the loop thus essentially creates two transmission  
18          paths within a single physical outside plant loop facility that can be used to  
19          support either line sharing or line splitting. The first "path" carries the low  
20          frequency band transmitted within the facility and the second "path" carries the  
21          high frequency band transmitted within the same facility. The low frequency, or  
22          voice output of the splitter, is cross-connected to the switched network (*e.g.*, the  
23          local switching UNE) and is then sent to its destination. The high frequency  
24          spectrum output of the splitter is cross-connected to a CLEC's DSLAM and is  
25          then sent over the CLEC's own data or packet network to its destination. Setting  
26          aside the issue of who owns or operationally supports the splitter and who owns  
27          or controls the space in which it is deployed, the high-level architecture involved



1 in providing access to the HFS of the loop to voice CLECs using UNE-P (*i.e.*, line  
2 splitting) involves essentially the same architecture that Verizon uses today to line  
3 share with its data service affiliate or with other data CLECs (*i.e.*, line sharing).  
4 Thus, it is appropriate to measure the manner in which Verizon supports line  
5 splitting by using the same measures of nondiscrimination that measure its  
6 support of line sharing, whether Verizon shares the loop with a separate data  
7 CLEC or provides both voice and advanced services itself.  
8

9 **Q. HAVE ANY OTHER REGULATORY BODIES FOUND THAT LINE**  
10 **SHARING AND LINE SPLITTING ARE ESSENTIALLY THE SAME?**

11 **A.** Yes, a number of key state regulatory commissions have already determined that  
12 these two arrangements are virtually identical. For example, the New York Public  
13 Service Commission found:

14 "There is no dispute that the engineering processes entailed in  
15 splitting a line for a UNE-P voice customer and sharing a line for a  
16 Verizon voice customer are identical: there is no physical  
17 difference. The record evidence to this effect is unambiguous.  
18 The differences arise on the operation of the OSS."<sup>203</sup>  
19

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203 Opinion and Order Concerning Verizon's Wholesale Provision of DSL Capabilities, New York Public Service Commission, Case 00-C-0127 October 31, 2000 at 11. *See also* Petition of SWBT for Arbitration with AT&T Pursuant to Sec. 251 (B)(1) of the FCC Act of 1996, Texas Public Utility Commission, Docket 22315, Order Approving Revised Arb Award dated March 14, 2001 ("[t]he Commission agrees with the Arbitrators conclusion that "there is no technical distinction between line sharing and line splitting, as the splitter provides access to the same functionality of the loop in both contexts.").

1    **IV.    Verizon's Specific Line Sharing and Line Splitting Obligations.**

2    **Q.    WHAT ARE VERIZON'S SPECIFIC LINE SHARING AND LINE**  
3    **SPLITTING OBLIGATIONS, AND HOW SHOULD THEY BE**  
4    **IMPLEMENTED IN THE INTERCONNECTION AGREEMENT NOW**  
5    **BEING ARBITRATED?**

6    **A.    AT&T has proposed contract language that spells out in detail the obligations**  
7    Verizon must fulfill to comply with its obligation to support line sharing and line  
8    splitting in a nondiscriminatory manner. It is not burdensome for Verizon to  
9    incorporate the language that AT&T has taken the trouble to draft. In fact, it  
10    saves trouble by clarifying the parties' rights, responsibilities and obligations.  
11    Yet, instead of welcoming the clarity that AT&T's language provides, Verizon  
12    has remained intransigent. Thus, AT&T has been forced to arbitrate these  
13    provisions up front, in order to avoid the likely need to litigate complaints over  
14    these issues later and to assure that its customers' needs will be met, especially  
15    with respect to the primary issues relating to the operational support that Verizon  
16    must provide for line splitting and line sharing.

17            Verizon does not (and indeed cannot) dispute that line splitting is a current  
18    obligation.<sup>204</sup> Thus, it agrees conceptually with AT&T's Issues III.10.A. and  
19    III.10.B.<sup>205</sup> However, even though those obligations are not generally disputed,

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204    See Verizon's Supplemental Statement of Unresolved Issues ("SSUI"), Tab B to  
Verizon's Answer, at 90.

205    Issue III.10.A.: Must Verizon implement both line sharing and line splitting in a  
nondiscriminatory and commercially reasonable manner that allows AT&T to provide  
services in the high frequency spectrum of an existing line on which Verizon provides  
voice service (line sharing) or on a loop facility provided to AT&T as a UNE-loop or as  
part of a UNE-P combination (line splitting)?

Issue III.10.B.: Must Verizon implement line splitting in a nondiscriminatory and  
commercially reasonable manner that enables AT&T to use all of the features, functions